

Entered at the Boston Post Office for Transmission through the Mails at Second Class Rates

VOL.V. A. BULLARD & CO. BOSTON, MASS., MARCH, 1899. SEAR, IN ADVANCE. NO. 3

THE COBRA'S FANGS.

FROOF THAT THEY ARE NOT IN THEMSELVES POI ONOUS.

How the Reptile Strikes and the Effect of the Blow-Action Is Magnificent and Swift as a Lightning Flash-Attack Is Usually Fatal.

Now, the so-called poisonous fangs are not in themselves poisonous—that is, they are not coated with poison; nor even have they a capillary tube running inside along their lengths, through which the cobra injects the poison into the wound. If that were the case, the cobra could not seize its food without infecting it with the poison. The real fact is there is a fine tube running from the base of each of the two fangs backward under the eye to an almondshaped gland or bag, which contains the poison. This gland is constantly secreting the poison, with a small supply for immediate use. Hence, if the tube connecting the gland to the base of the fang were kept open, the poison would be constantly running out into the mouth of the copra, and thus wasted to no purpose. To prevent this a circular muscle binds the tube somewhere about the middle. But when the cobra strikes its prey, this muscle is relaxed, and another one squeezes the poison-bag, and thus injects the poison.

But let us describe the whole process of striking, and see what the cobra does when he means mischief. He expands his head and rears at least a third of his length in the air, with the rest of the body coiled in the form of a spiral. This spiral form gives him sufficient anchorage to rear his body by sheer muscular effect, and also the necessary leverage in dealing the blow. His eyes glisten like obelisks, his forked tongue darts in and out with a low, hissing sound. Suddenly he throws back his head in a low curve, and as swiftly darts forward to his victim, partly as a plunge and partly as a spring, unfolding a portion of his coil to increase his range. It looks as if the cobra sprang into the air, but, as a matter of fact, his belly usually touches the ground at the moment of striking, in order to afford him sufficient leverage to imbed his fangs firmly in the body of the victim.

The action is magnificent, and yet swift as a lightning flash. The tongue is withdrawn the mouth wide open.

The fangs fall on the victim as a stab, the lower jaw closing in beneath as a bite. If the blow has been fair and square, two small punctures are made in the flesh of the victim by the two fangs; otherwise, if the blow has been one-sided, there will be only one nuncture.

Now, the mere striking of the blow is not enough, and if the cobra were instantaneously to withdraw the fangs after dealing the blow, his prey would suffer no worse effect than the pain of those needle-like punctures. It is still necessary to inject the poison. In certain cases, indeed, by a strong muscular action, the poison has been injected almost simultaneously with the blow; nay, in a case where the cobra was inordinately roused to fury, the poison was shot out by a strong muscular effort while the cobra was still n the act of plunging—and in this case the would-be victim, who was really out of range, escaped the blow, but had the poison squirted all over him. Still, however, in mest cases the poison is injected after the blow—though it be but half a second after. That half a second has saved many a life-for instance, where the blow, not being struck full in the body, but only on the edge of it, the cobra slipped off the body by the mere impetus of the blow, causing the fangs to scratch along the skin in two thin lines.

Assuming, however, that the blow has been struck full on the body of the victim, the cobra immediately after the blow wriggles his head either to the right or to the left. This act of turning helps to squeeze the poison gland situated on that side to which the cobra has turned, and thus to inject the poison over the puncture on that side. After this discharge the cobra usually drops off the limb in an inert mass as if considerably, though temporarily, weakened by the loss of the precious fluid. There may, of course, be sufficient secretion still left in the bag to give a second bite immediately after, but in that case the wound may not necessarily be fatal.

A New Artificial Stone.

Papyristite is a new artificial stone, made from purified paper pulp and other ingredients, by Fr, Gehre, a civil engineer of Zurich. It is an improvement on papro litte, invented by the same man. It is especially intended for jointless roofs or floors, and is a non-conductor of heat, cold or sound.

linoleum-like feeling under foot, and is noiseless. It weighs less An stone or cement, and 220 pounds of the preparation in powdered form, spread .4 inch thick, will cover ninety square feet. The cost is said to be exceedingly low, and it can be laid without special machinery; it is dry in twenty-four hours, and can then be highly polished.

The Cuckeo's Egg.

Of British birds the cuckoo lays the smallest egg in proportion to its size.

Jumped a Chasm of S'xty Feet.

'Liough the Italians are not an equestrian people, the Italian army are or late beginning to cultivate the art of horsemanship. Giuseppe Masi, a lieutenant of the calvary, recently performed a feat which for dare-devil



courage and finesse of execution excels anything heretofore attempted. In the neigh orhood of Quinte, a suburb of Rome, there lies a vast stretch of plateau, environed semicircularly by a long range of steep rocks. In order to win a wager, the officer on his horse jumped from the highest of these rocks over a yawning chasm, a sheer descent of sixty feet. Horse and rider escaped unhurt.

Spots on Tobacco.

"It is really astonishing that so many manufacturers of cigars desire to use spotted leaf tobacco," says a dealer in that commodity, "for when you come to consider that the spots on the leaf are due to artificial causes in many instances, and that these methods are positively hurtful, since strong acids have to be employed in the process of spotting, one would think they would wish to avoid it for this reason alone. It is not to be denied that some kinds of leaf tobacco, notably Sumatra become spotted from natural causes, but this adds nothing to its quality, as such spots are a disease, and are not found in healthy leaves, and a proof of this is that Havana tobacco with a spotted wrapper is inferior in taste to the same tobacco with a plain wrapper. It is well known to experienced manufacturers that the best fermented and highest flavored tobacco is without spots and of a reddish to brown color, and smokers in general will best consult their own interests in avoiding spotted cigars, for reasons already mentioned, and the additional one that manufacturers are able to sell a cigar of better quality when the wrapper is plain.

ALASKA'S BROWN BEARS.

They Are Good Roadmakers and Furnish Dangerous Sport for the Hunter.

"The brown bear is the great roadmaker of the Alaska peninsula," said a guide of many years' experience in that region. "Not only are the banks of the streams trodden into good trails by the huge, lumbering brutes, but the swampy plains are crossed in every direction by paths leading to the hills. The traveler will do well to follow them in journeying across the country, as they invariably lead to the best fording places of streams and form the easiest routes to the hills. The northern side of the Kenai peninsula, bordering the shores of Cook Inlet. Kaodiak Island and the Alaskan peninsula as far west as Uniak Island are favorite stamping grounds of the Alaska brown bear. He is a huge, shaggy animal, varying in length from six to twelve feet and weighing from 800 to 1,100 pounds. This bear posseses all the courage and fierceness of his southern cousin, the grizzly, and he has been hunted so little as yet that he is absolutely fearless of man and is an exceedingly dangerous ad-

"In dealing with the Alaska brown pear a hunter should never go alone. A companion is almost as essential as a gun. If possible, a man well acquainted with the peculiar habits of this animal should be engaged to act as guide. Good bear dogs are of great assistance; but they must be brought into the country by the hunter, as there are very few 'dogs there. There are no trees as far west as Portage Bay, and the hunter must be exceedingly careful how he enters the heavy thickets which cover the river bottoms, as the bears tavor this kind of ground, and if aroused or wounded will unhesitatingly attack.

"Being an expert fisher, the bear frequents, during the salmon season, all the rivers emptying into the Behring Sea and the north Pacific and their tributaries as far as the fish go. After the salmon run is over the animal retreats into the recesses of the hills, where berries and small game are plentiful.

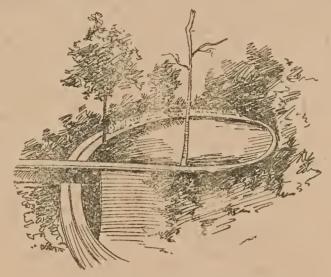
"The Alaska cranberry is an especially toothsome morsel to the brown bear, has a particularly sweet tooth. The Alaska cranberry grows on marshes that are 2,000 and even 3,000 feet above the sea level. When ripe they are almost a deep purple Jelly made from

these berries is of a rich claret color, and as transparent as the most flawless glass. The flavor of it is delicious. Bear hunters haunt these elevated marshes when the berries are ripe, for then they are sure of a profitable and easy bear harvest.'

A Curious Railway.

An Indian line, the Darjeeling-Himalayan railway, is one of the most remarkable in the world, and is also the highest, its Darjeeling terminus being situated on a giddy eminence 8,000 feet above the level of the plains.

At many points it is possible to see the curves above and below the train, no fewer than seven tracks being



A CURIOSITY IN ENGINEERING.

visible at one place. The sharpest curves are at a place well named "Agony point," where the train on two occasions almost describes a circle in its own length. One of the most striking features of a journey up the Darjeeling-Himalayan railway is the sharp transition from the burning heat of the plains to the cold air and the snows of this great hight.

Clocks Without Hands and Faces.

In Switzerland they are making clocks which do not need hands and faces. The clock merely stands in the hall and you press a button in its stomach, when, by means of the phonographic internal arrangements, it calls out "half-past six" or twenty-three minutes to eleven," as the case may be.

The Chameleon,

When a chameleon is blindfolded it loses all power of changing its color, and its entire body remains of a uniform tint.

Curious Test for a Husband.

Both in the northern and western islands of Scotland the natives have some peculiar customs unfamiliar to the dwellers of the mainland. One of these, known as the "marriage test," is practiced in the island of St. Kilda. where the population barely exceeds a hundred. The desire among the islanders to increase this number does not seem to be exceptionally strong, and every man, before he is deemed suitable for a husband, has to perform an evolution with no little bodily risk. The St. Kildans are, or course, adept rock-climbers, and the aspirant for matrimony is therefore subjected to the test of balancing himself on one leg on a narrow ledge overhanging a precipice, bending his body at the same time in order to hold the foot of his other leg in his hands. If found lacking in courage the maiden withdraws her betrothal, and should the man fall over the ledge it is presumed that, in his case, he will be disqualified.

Our Madrids.

In the United States there are no lewer than eight towns named Madrid,

ODD NAMES IN MECHANICS.

Foreigners Have Hard Work Translating Some English Words.

The English language has been enriched by many words drawn from other tongues to facilitate direct and comprehensive expression on all subjects.

Within the language itself a similar principle has prevailed, and old words of well-established rreaning have been adopted in the sciences and arts to designate certain things or operations that seemed to resemble those from which the names were taken. In their new relations these words have strictly technical meanings.

Their suitability is often obvious enough in English, but they can rarely be rendered in their exact technical sense into their actual equivalents in foreign tongues.

A number of words drawn from the animal kingdom for use in the mechanic arts are enumerated by a writer in Straps and Buckles. The machinist employs a dog on h-s lathe; he takes a hog cut, if the tool will stand it; the castings are made from pigs of iron, which in turn were fed from a sow.

Work is set upon a horse or buck, and punch d or bent by a convenient bear. Hoisting is done by a crab, and a convenient cat is a part of the outfit of a shop erane, and a kit of tools is ever on nand.

A crow helps to straighten work, a jack to list it, a mule pulley aids in driving machinery that a donkey engine turns. A fish connects parts end to end, or strengthens a broken beam: shells are used all over; a worm does powerful but quiet work.

A cock shuts off the water; one kind of a ram raises it and another does heavy work. A printing press has a my; the first locomotives had a grasshopper valve motion and drive, and butterfly valves are common.

Herring-bone gears are used by the best builders; turtles fit printing press cylinders, and fly wheels are running all over the world. In drilling, even an old man is called into service and doctors prevent faulty lathe work.

Modern Coats of Arms,

Many people associate chain armor shirts and mail with medieval times, and do not suppose for a minute that any such suits are made to-day, but such is the case. This mail armor is manufactured by a firm in Walsall, England, who supply the English Goverrment with mail chain jackets for use in India, Central and South America, etc. These mail jackets, which weigh from fifteen to eighteen pounds, are worn by army officers, and are made of steel rings, three-eights of an inch in diameter. It takes about 3,000 rings to make a square foot of armor.

Many Big Cities in Japan.

Japan, with a population of 45,000,-300, has 220 towns that have more than 100,000 inhabitants. In 1886 the number of such towns was 117. Osaka has increased from 360,000 to 510,000 inhabitants, in ten years. Yohohama from 89,000 to 180,000, Kobe from 80,-000 to 185,000. Tokio has now a population of 1,300,000.

Sewing and Reaping.

An Atchison man whose wife received 128 wedding presents because she was a lovely character, is now compelled to attach his suspenders to his pantaloons with a nail.

The Youth's Realm.

THE UNLUCKY DAYS.

The Ancients Had a Long List of Days to be Feared.

In ancient times the heathen were so superstitious with regard to certain days that they were pointed out in their calendars with different colored characters to mark the lucky ones and the unlucky, and all classes arranged the details of their daily life with reference to these marks.

We of the present day claim to be free from all this, but many there are who will not begin a journey nor a piece of work on Friday, nor cut the hair in the last quarter of the moon, and who are very much frightened if the soft rays of Luna chance to fall upon the face while they are asleep.

Friday is even under a ban; even with regard to the weather, there is an old saying which declares that

Friday's moon,
Come when it will, comes too soon.
In countries where capital punishment is in vogue Friday has nearly always been "hangman's day."

There are many superstitions connected with New Year's day; one that is still firmly believed by many of the devout is that of opening the Bible at random and putting the finger on any chapter contained in the two open pages. It is believed that the luck or unluck of the coming year will in a greater or less degree be foreshadowed by some of the lines.

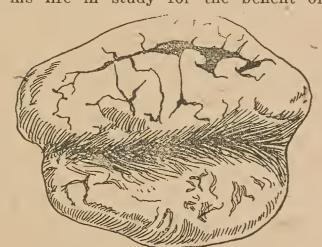
Again, others believe that it is very unlucky to take anything out of the house on New Year's morning before taking something in; the old rhyme which expresses this belief runs as follows:

Take out, then take in, Bad luck will begin: Take in, then take out, Good luck comes about.

Certain days for birth have generally some particular attribute given them which tell us that the child: Born on Monday is fair of face; Born on Tuesday, full of God's grace; Born on Wednesday, sour and sad; Born on Thursday, merry and glad; Born on Friday, worthily given; Born on Saturday, work hard for your

Born on Sunday, you will never know want.

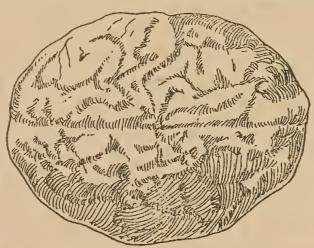
An Instrument to Hear You Think.
Dr. Verenzi, the great German specialist, who has made a fortune and can afford to spend the rest of his life in study for the benefit of



THE PARENCHYMATOUS CELLS. humanity, is shocked that so little is known of the brain. He has discovered that the brain is in two halves—the interstitial and the parenchymatous cells—which have hitherto been treated as a whole.

He is at work on an instrument which will enable him to see and near the brain, as the heart and lungs are heard. Then he will know how to

treat the patient, whether the ailment



THE INTERSTITIAL CELLS.
be brain fever or insanity. He will
be able to detect whether the trouble
is due to mental or physical weakness,
and will treat and prescribe accord-

ingly.

Devil Worsh'p. In Spain, Germany, France, Italy, as well as in the northern countries which had embraced the reformation, devil worship was believed to be practiced, orgies celebrated, malevolent tricks of revenge perpetrated by the votaries of the evil one on their neighbors. If a child was seized with epileptic fits of if a pig died suddenly, if a toad were found under the bed or a cat jumped in at the window, if a cross-grained old woman cursed a rude, ill-mannered brat, and the child afterward suffered with any complaint the witchcraft which must undoubtedly be at the bottom of such occurrences called for immediate investigation. Nor was it long before a victim was forthcoming. Denial was of no avail. The longer such denial was persisted in, the longer were the tortures inflicted. The accused was urged to confess to the usual charges, and encouraged to accuse others, in turn to suffer the same fate. And so the horrible business spread, until, like a prairie fire, it burned itself out for a time, only to start again from some fresh sparks of suspicion. The crime itself was

A family in Brooklyn was recently annoyed every morning by finding the bottle of milk left by the milkman on the front stoop knocked over and the contents gone. One night a member of the family volunteered to get up early the next morning and watch for the culprit. Soon after the young man had taken up his station he was rewarded by seeing a large black cat come across the veranda, knock over the bottle and calmy lap up the milk, which had been spilled. Now the fam-

ily puts out a large tin can.

held by all to be so enormous that no

punishment could be too great for it.

A Waterproof Paper Bag.
A Frenchman has just patented a paper-bag material impervious to water, the ordinary wrapping being coated with gas tar and the layer of tar covered with a thin sheet of tissue or similar paper, so that the tar does not come in contact with the contents of the bag.

Facts About Humanity.

Of the entire human race it is estimated that 500,000,000 are well clothed—that is, they wear garments of some kind; 250,000,000 habitually go naked and 700,000,000 only cover parts of their bodies; 500,000,000 live in houses, 700,000,000 in huts and caves, and 250,000,000 have virtually no shelter at all.

Selling Newspapers in Paris.

Here is an idea for some smart newsboy to improve upon. The Compagnie Generale des Omnibus issued an order forbidding newsboys from entering its vehicles. How would it now be possible to reach would-be customers perched on the "imperiales," the seats provided on the roofs of

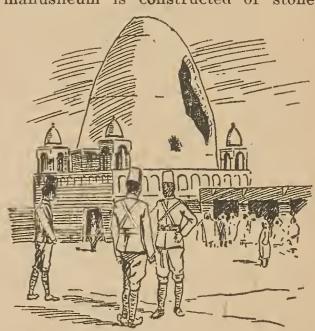


SELLING NEWSPAPERS IN PARIS.

the street cars and omnibuses? The problem was soon solved, for one fine day a man selling papers appeared near the Madeleine with a peculiar apparatus. He had a stick seven or eight feet long, with wire clamps fastened to its sides and papers stuck in them. On the top there was a small metal cup with a hole in the bottom. The hole was a very important part of the apparatus, for it reached all the way down through the stick, and through it came the copper coins of one or two sous, according to the price of the paper selected by the patron.

The Mahdi's Tomb Shot to Pieces.

After the fall of Omdurman the Mahdi's tomb was found to be considerably damaged by the shell fire from the victorious army. The interior of the building was completely gutted, and portions of the dome and the subsidiary cupolas were falling in. The manusileum is constructed of stone.



with walls six feet thick, thirty-six feet square and thirty feethigh. From hexagonal walls above the square springs the great dome, forty feet to the crescent terminal. The interior is rudely ornamented. A wooden sarcophagus with glass panels stands in the centre beneath the arched roof.

EXTRAS IN THE NAVY

THERE ARE MANY CHANCES ON A WARSHIP FOR EARNING MONEY.

Good Cooks Always in Demand and Pick Up Odd Dollars—Some Ship's Barbers Have Made \$100 a Month Above Their Regular Pay.

If anything is needed to prove that each warship in commission is a regular community in itself—a village apart with all that pertains to such an economic institution—the fact that barter and trade and manufacture is cauried on would suffice. The money paid out by Uncle Sam to his naval defenders is not the only income derived by those on board h.s vessels of war.

When it is understood that many a bluejacket occupying a position classified at from \$18 to \$40 a month, is paid off at the end of a three-years' cruise with \$2,000 and \$3,000 safely tucked away in his "monk bag," it will be easily seen that trafficking on warships is not unremunerative.

There are no trained cooks in the naval service, so when it happens that a landsman or coal passer develops skilled knowledge of the culinary art, he is eagerly snapped up.

The chief mogul of the galley or man-o'-war kitchen, must not be passed over. The naval pay table contains in the messmen branch, a rating termed "ship's cook" of the first, second, third and fourth class. The pay ranges from \$35 to \$20 a month, according to the size of the vessel, and the incumbent is supposed to tend the galley coppers and range.

As in other cases, the ship's cook does not depend on his salary alone. He is in a position to do many favors for the berth deck cooks and there are very few who do not pay him at least

\$1 a month.

In addition to this source of income, a thrifty ship's cook can find ample opportunity to use the range in the making of a pastry which can be retailed to the crew.

One cook, several years ago, cleared a comfortable sum by selling dried

apple pies at 25 cents each.

The same yearnings for things eatable which causes Jack to buy these pies also sends him to the cabin, wardroom or steerage steward, who, on most ships, does a land office business in the sale of jellies, jams, pickles and fancy canned goods. Some also keep on sale tobacco, cigars and cigarettes, which they retail at enormous prices.

Next to the creature comforts of his inner man, the naval sailor thinks most of his personal appearance.

On each ship will be found a gunner's mate, quartermaster, seaman, oiler, or even a fireman who has served an apprenticeship in the naval tailoring art on board some other vessel. Such a man is permitted to maintain a small hand sewing machine on board, and during odd times off watch, he sets up his shop in the corner of the berth deck or in the superstructure and stitches away industriously.

There is money in it for the man who does good work. The price for making a suit is \$5, and there are many suits to be made on the average man-o'-war. The tailor also does odd jobs in mending for the officers aft, who pay according to their official dignity.

Bearing out still further the similarity of a warship community to a village ashore, there will be found in the

service not only the small tradesmen, but one peculiar man who is the capitalist and boss money maker of the ship. He is the ship's barber. The ship's barber flourishes, and he has on his list at \$1.25 a quarter a goodly share of —e crew. For the sum mentioned he will give two shaves a week and a halr cut once a month.

He also has his customers aft who pay him at the rate of \$2 a month. At least two-thirds of the crew on an average patronize the barber, which means, on a vessel of the Columbia class, an addition of over \$100 monthly to his regular pay of \$16. Few barbers ashore make this sum.

One of the peculiar trades practiced in the service is the manufacture of ditty boxes. A ditty box is a small wooden chest which serves the blue-jacket as a repository for his comb and brush, tobacco, writing paper and the various odds and ends which would be found in the drawers of the ordinary dressing case ashore. The regular ship's carpenter and his mates follow this trade, and they are enabled to add considerably to their salaries.

Among the bandsmen on a flagship will be found a shoemaker who has served at his trade long enough to be able to patch the footgear of a ship's company.

A NOVEL TOBOGGAN.

HAIR-RAISING RID? DOWN PIKES PEAK RAILWAY TRACK.

The Device Consists of a Plank Three Feet Long and Twelve Inches Wide—The Astonishing Speed That Is Developed—Friction Sometimes Stops the Machine.

Although there are many kinds of vehicles in service on railway track, perhaps few people ever thought of using such a thoroughfare for a toboggan slide, especially track with rack bars along its middle; and besides, there are few steam railway tracks steep enough for the purpose. The accompanying illustration shows a device used by the officers and employes of the Manitou Pikes Peak railway



TOBOGGANING ON PIKES PEAK.

for coasting down the track, the average descent of which is 844.8 feet per mile. The toboggan is supposed to be used only for pleasure purposes, no employe being authorized to use it while in discharge o. his duties.

The device consists essentially of a plank 12 inches wide and 3 feet in length, along the middle of the under side of which there is a cleat which runs between the rack bars and holds the toboggan thereon. On either side of the middle cleat there are brake shoes bolted to the plank at one end and bearing against the outside surfaces of the rack bars or cog teeth.

These brake shoes are applied by clamps bent over the sides of the plank

and operated by a lever which, as appears in the illustration, the rider holds within his grasp.

The plank bears upon the upper edges of the cog teeth by steel runners, which consist of two straps bent over the ends of the plank. To hold the device in balance a bar or pole is bolted to the top of the plank, crosswise, extending over the track rail one either side. Across the front end of the plank there is bolted a rest for the rider's feet.

The method of operating the device is simply to place the toboggan on the track, sit down and attend to the brake.

The speed attainable with this toboggan depends upon the pleasure of the rider. A record of a fraction under a mile a minute has been made on the particular toboggan shown in this illustration, there being many of them in use on the road.

The entire stretch of track from the top of the peak, down to Manitou, nine miles, is used, except at four points where the track rails diverge at sidings. At these points the rider must come to a stop and carry his toboggan about 40 reet. It is officially stated that on one occasion an employe of the company made the entire trip over the nine miles in 11 minutes.

The high friction created by the contact of the runners with the rack rails causes the former to heat, and on the ighter grades of 8 to 12 per cent the heated runners have been known to adhere to the rack rail and stop the toboggan.

For the purpose of lubrication and to prevent the runners from unduly heating, the rider carries a bar of soap which he applies to the top of the rack teeth by reaching over in front of the toboggan. Even then the friction is so great that at very high speed on the long grades streams of fire follow the toboggan.

Hard on a Watch

"It is bad practice to be continually setting a watch by the stem-setter," observed a watch repairer to a reporter, "for it has a tendency to wear out the band that attaches the hands to the pinion. The hands are tightened to the pinion as firmly as they can be, and every setting loosens them somewhat. There is a class of persons who set their watches every day rather than give a little attention to the matter of regulating them. They find that the watch gains or loses a minute or a few minutes in each twenty-four hours, and instead of curing this by the regulator, which is put in the watch for that purpose and no other, they force back or forward the hands by the stem-setter or by a key. If the hand pinion wears out, which it frequently does, it is considerable of a job to put in a new one or place new hands on it, and the work necessarily costs something, for watch repairers have to charge for their work. If a person knows that a watch gains or loses a certain amount in each day, it is better to calculate back or forward than to be continually setting it. A little study of the regulator will do the work much better, without the risk of wearing out anything."

Test for Naval Divers,

Divers in the British Navy, before being passed as proficient in their craft, have to be able to work in twelve fathous of water for an hour, and twenty fathous for a quarter of an hour.

BEAUTIFUL DEADLY ORCHIDS

A Forest of Beautiful Flowers That No One Can Approach.

M. Serge Belaguine, a Russian explorer of Brazil, states in an interview recently published in The Gaulois that a few degrees below the equator he discovered a forest of flowers that prevented him from approaching them. With every deference to Mr. Belaguine, that forest seems to have been discovered before, says Collier's Weekly. Two years ago there appeared in a San Francisco paper an account provided by a bulb hunter returning from the same region, who declared that after noticing in a forest an odor, vague and sweet at first, but which increased as he advanced, ultimately he reached a clearing, and there, straight ahead, was a wilderness of orchids. were loaded with them, underbrush was covered with them, they trailed on the ground, mounted in beckoning contortions, dangled from branches, fell in sheets, and elongated and expanded as far as the eye could reach. A breeze passed and they swayed with it, moving with a life of their own, dancing in the glare of the equatorial sun, and as they danced exhaling an odor that protected them more sheerly than a wall. In vain did that hunter endeavor to approach. There was a veil of perfumed chloroform through which he could see, but through which, try as he might, he could not pass. It held him back more effectually than bayonets, and it was torture to him to see those flowers and to feel that before he could reach them he must die, suffocated by the very splendors of which he was in search, poisoned by floral jewels such as no one perhaps had seen before. At the time the place was known as the village of demon flowers.

A swallow is considered one of the swiftest of flying birds, yet a dragon-fly can escape with the greatest ease from his pursuer, so swiftly does this insect fly. A naturalist tells of an exciting chase he saw between a swallow and a dragou-fly. The insect flew with incredible speed, and wheeled and dodged with such ease that the swallow, despite its utmost efforts, completely failed to overtake and capture it.

Artificial legs and arms were in use in Egypt as early as B. C. 700. They were made by the priests, who were the physicians at that early time.

The Cigarette in Europe.

The cigarette was first introduced into this country at the close of the Crimean War by British officers, who had found themselves under compulsion to adopt Turkish fashions of consuming tobacco, seeing that there was not a decent cigar to be obtained for love or money throughout the length and breadth of the Ottoman Empire. Pipe smoking was strongly discouraged at regimental messes forty odd years ago; indeed, it is scarcely tolerated at the present day in some of the "tone-giving" military and "noble" clubs in Germany.

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THE CHINESE PEDDLER.

Little Ones Have to Depend on Him For Their Toys.

Few, indeed would be their playthings if the Chinese children had to depend on toy stores for them. As it is, the peddler is a familiar sight in every Chinese city, and when the children hear the gong of a toy seller it is a signal for a rush to the front gates to catch him before he gets by.

At a call these men slip the pole from their shoulders and set their baskets on the ground, and there is always a group of children ready to gather around them

A display of toys carried by one of these toy sellers includes many things familiar to Americans, though the shapes seem odd and fantastic. Clay fruits, dolls of all kinds, pewter jewelry, earrings and hair ornaments, firecrackers of strange shapes which will hardly ever go off, toy pipes, little bowls and chopsticks, small carved idols, little horses, dogs, camels and elephants all covered with rabbit fur, and wagons with music boxes under the seats that grind out a tune as you pull them along.

Other things seem stranger still, for the kites, made in the shape of birds, fish, serpents, dragons and even inanimate objects like bells and houses, will have wind harps fastened on their backs to make them sing while in the air, and will have eyes set loose in their heads, so that when the wind blows the eyes will turn around and look as if they were winking at you. There are long glass trumpets, to be blown like bugles, that give out a beautiful, clear note. Little shuttlecocks made out of a couple of cash bound together with red leather and with a bunch of feathers fastened in the holes in the cash, which the children keep in the air by humping with their heads and striking with their feet. Molds for making clay money, whistling tops that spin on a string held between two sticks; small whistles to fasten on the tails of pet pigeons to whistle as they fly.

Italy's Poor.

Marvelous economy is practised by the poor of Italy in looking after the wants of the inner man. Coffee grounds from the wealthy man's kitchen are dried and resold to the poor. In a similar way oil is twice, and sometimes three times used, the drippings after each successive frying being gathered from the pan and sold to the poor.

A Mexican Law.

The laws of Mexico provide that a Mormon who wishes to take a second wife must present a certificate, signed by his first help-meet, to the effect that she is willing; and he must also have the express consent of the sencond wife and her parents.

YOUTH'S REALM,

An Illustrated Monthly
Magazine, for Both
Young and Old.

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ADVERTISING RATES—

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Owing to sickness in the editorial staff certain departments of the paper have not received their full quota of news, this month.

We expect to have all departments in working order, however, before the April issue goes to press, and to appear earlier in the month hereafter.

Jack Horner.

Everybody who has once been a child knows the rhyme about "Little Jack Horner," who "sat in a corner." That there was ever a real Jack Horner, and that the plum extracted from the pie was a very valuable plum indeed, few of the little folks who enjoy his exploits know, or would care to learn.

It appears that this worthy was steward to an abbot of Glastonbury. The good abbot learned that his majesty Henry VIII had seen fit to be indignant because the monks had built a kitchen which he could not burn down. Now, a king's indignation was dangerous, and must be appeased. Therefore the abbot sent for his steward, Jack Horner, to present the sovereign with a suitable peace offering. It took the form of a big and tempting looking pie, beneath the crust of which the transfer deeds of twelve manors were hidden.

But Master Jack had an eye for the profit of number one, and on the road he slyly lifted the crust and abstracted the deeds of the Manor of Wells. On his return, bringing the deeds, he plausibly explained that they had been given to him by the king. Hence the rhyme:

Little Jack Horner
Sat in a corner (of the wagon),
Eying his Christmas pie;
He put in his thumb
And pulled out a plum (the title-deed),
Saying, "What a brave boy am I!"

Spider's Production is Small.

The amount of silk produced by each spider is so small that scientists computes that 663,522 would be required to produce a pound of thread.

LARGEST TOY EVER MADE.

Contains a Variety of Familiar Objects in Min'ature.

The largest toy on record has just been completed at Baltimore, Md. The designer and builder is Adam J. Winfelder, and his workshop, where the toy was constructed, is one end of his parlor. The toy is apparently located on a large plateau and is a composite affair containing all sorts of familiar objects in miniature.

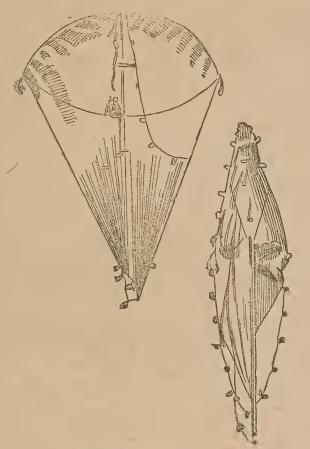
There are a Ferris wheel with eight cars; sixteen swings; an old-time flour mill, operated by water power; a moving train of cars; a pump, with a little girl at the nump handle; an old-fashioned seesaw; a carrousel or merry-goround; a lake dotted with boats of all descriptions, containing hundreds of silver and gold fish, a miniature boat club in a race, negroes fishing and a shoot-the-chutes; a fortress, a castle, a church, a log cabin, a light house in the center of the lake, from the top of which a tiny light gleams; farm houses, picnic grounds, pavilions, band stand, scores of children, &c.

Mr. Winfelder has occupied all his spare time for the past two years constructing this beautiful toy, the various features of which are as natural as can be. Not a detail is omitted to render all things realistic. For instance, at the grist mill a miller is seen raising barrels of flour by a pulley, and around the farm houses are figures apparently engaged in the various occupations which are so familiar in connection with agriculture.

The power which operates all the mechanical features of the toy is a water motor, but it is so concealed that for a time the cause of action is a mystery to the onlooker.

A Kite That Collapses.

Kites are being made bigger as the boy of each generation increases his demands. It is comfortable, therefore,



KITE OPENED AND CLOSED. to know that there has been invented one of these gigantic toys which can be spread and then changed into a small compass after the same principle as an umbrella.

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Cash in advance.	Pos	t extra.
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Porto Rican Filters.

cent under Scott catalogue.

Water is filtered in Porto Rico in a manner which affords an opening for American enterprize. In the courtyard of nearly every house stands one or two of the native filters. They are made in two main parts. The upper is a



A NATIVE FILTER.

ponderous porous stone, hollowed out to the shape of a wash basin. By a statwork of uprights it is supported directly over a stone receptacle on the ground. A gallon or two of water is poured into the upper, and falls drop by drop into the lower. The water is made clear as crystal, and, while the method is slow, it is sure. An inspection of the moss-covered lower half of the upper stone detracts a little from the esteem which the water wins at a first glance.

To Purify Air.

An Australian has designed a receptacle for deodorizing and aromatizing the air of rooms, the vessel having a large bulb at the lower end and an elongated neck with a cap at the end to close the openings. The disinfectant used is composed of ammonia, acetic ether and oil of lavender or other perfume.

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SMITH & SMITH. AKRON, OHIO. 109 GOOD ST.,

MAKING A LAZY FISH WORK.

Manner in Which the Chinese Make Use of the Remora.

Most voyagers in tropical seas are acquainted with the remora, which is known generally by the trivial name of the sucker. The distinguishing characteristic of this fish is laziness. Unwilling to exert itself overmuch in the pursuit of food, it has developed an arrangement on the back of its head exactly like the corrugated sole of a tenmis shoe, and as artificial in appearance as if made and fitted by the hand of

When the sucker finds itself in the vicinity of any large floating body, such as a ship, a shark or a piece of flotsam, whose neighborhood seems to promise an abundance of food, it attaches itself firmly thereto by means of this curious contrivance, which permits it to eat, breathe and perform all necessary functions while being carried about without any exertion on its part. It can attach and detach itself instantaneously, and holds so firmly that a direct backward pull cannot dislodge it without injury to the fish.

Several good sized specimens of the fish having been caught the Chinese fishermen fits small iron rings to their tails, to which he attaches long, slender, but very stout lines. Thus equipped the fisherman sets out, and when a basking turtle is seen two or three of the suckers are put overboard. Should they turn and stick to the bottom of the raft they are carefully detached and by being pushed forward with the inevitable bamboo, are startbed on the search again. At last they attach themselves to the supine turtle. Then the fisherman hauls in the lines, against which gentle suasion the hapless Chelon struggles in vain. on board the raft the useful remora is detached and is at once ready for use again.

Origin of Blind Man's Buff.

This favorite sport of childhood and youth is of French origin and very high antiquity, having been introduced into England in the train of the Norman conquerors. Its French name, "Colin Maillard," was that of a brave warrior, the memory of whose exploits still live In the chronicles of the middle ages.

In the year 999 Liege reckoned among its valiant chiefs one Jean Colin. He acquired the name Maillard from his chosen weapons being a mallet, wherewith in fight he used literally to crush his opponents. In one of the feuds which were of perpetual recurrence in those times he encountered the Count de Lourain in a pitched battle, and, so runs the story, in the first onset Colin Maillard lost both his eyes. He ordered his esquire to take him into the thickest of the fight, and, furiously brandishing his mallet, did such fearful execution that victory soon declared itself for him.

When Robert of France heard of these feats of arms he lavished favors and honors upon Colin, and so great was the fame of the exploit that it was commemorated in the pantomimic representations that formed part of the rude dramatic performances of the age. By degrees the children learned to act it for themselves, and it took the form of the familiar sport.

The blindfolded pursuer, as, with bandaged eyes and extended hands, he gropes for a victim to pounce upon, seems in some degree to repeat the action of Colin Maillard, the tradition of which is also traceable in the nameblind man's buff.

To Hypnotize a Chicken.

There are many interesting tricks children can do with little trouble and expense. They are really applications of scientific principles, but when properly done look like magic.

For the first thing they might hypnotize a chicken. To do this have a dark table and draw a white chalk line across it, beginning from directly un-



HTPNOTIZING A CHICKEN.

der the bill of the chicken, whose beak should be held down to the table so that it must look at the line. A rooster will become senseless and nerveless by the time the line is two feet long, and remain with his beak glued to the line sometimes over a minute—and that seems long.

Excuses for Baby,

Teasing Friend-What makes that new baby at your house cry so much, Tommy?

Temmy (indignantly)—It don't cry so very much; and, anyway, if all your teeth were out, and your hair off, and your legs so weak you couldn't stand on them, I fancy you'd feel like crying yourself!

Where Babies Can Swim.

The Sandwich Islanders are so fond of the sea that they actually teach their children to swim long before they are able to walk.

The tiniest mites play games in water well out of their depth.

Crown Prince of Siam.

The Crown Prince of Siam is among the boy authors of the world; he has written several stories for English children's magazines, and can write fluently in three European languages.

Ants That Commit Suicide.

Fire will frighten almost any creature, but it has no terror for the driver ant, which will dash at a glowing coal, fix its jaws in the burning mass, and shrivel up in the heat.

Killed the Chief Priest.

It used to be the custom when the chief priest of one of the Congo tribes showed symptoms of illness to kill him forthwith, either by strangulation or by the aid of a club, the natives believing that if he were allowed to die by disease all the rest of the world would perish.



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No. 263.—Riddle.

Though a level head I've got, Intellectual I'm not.

Many gossips reach my ears, but I heed them not a jot.

No white cross do I display,

Yet I labor in my way For the sacred cause of purity and aid it day by day.

But I never, never yet

Made a speech, and when folks get Up to make remarks on me I am totally upset. Yet I honestly can claim

That I shared the life and fame Of an ancient Greek philosopher-I'm sure

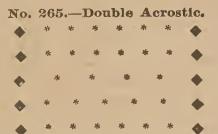
you know his name. And the mad and witty Dean-Yes, of course it's Swift I mean-Wrote my history immortal, which you proba-

bly have seen. But 'twould make the brave turn pale

And the tender hearted wail To hear careless people threaten that they'll "throw me to the whale!"

No. 264.—Little Folks' Picture Puzzle.





The upper horizontal row of eight, a large wading bird of the southern states, the color white, the quills and tail a metallic blackish green. Birds of this species live in flocks, feeding upon fish and aquatic reptiles. The second row of eight, the golden robin. The third, of six, a small bird of bright ultramarine blue color. It is found east of the Missouri. Its song of eight or ten notes is generally uttered from the top of a low tree. Its nest is built of grass upon the stalks of rank grass or other plants. Its eggs are blue, with a spot or two of purple at one end. The fourth row, of seven, a scarlet bird, east of the Missouri. Its eggs are of a dull greenish blue, speckled with reddish brown and light purple. The row of eight, two birds, both of the arctic regions: The first, of five, is an expert diver, often going down ten fathoms in search of food. This bird is said to pluck the down from her own breast to place around her eggs. The second is incapable of flight. It is a swimming bird.

The primals and finals name a bird found in Europe. It is 42 inches long. It is white, with the wing quills black and the feet and bill red. It builds in towers and steeples and returns to the same spot year after year.

ave The Largest Assort ment of LAMPS and FIXTURES in New ERBURY, 181 FRANKLIN ST. BOSTO

No. 266.—Numerical Enigma.

He could not 123, Although he often said it; But bolder words spoke he,

Which brought him some discredit. Words that began to 123 him round; "Sedition" has been whispered, as he found.

Growing 1234 Gave him dark premonition; The field was near his door, A most familiar vision. But still his ready 456 he took, To picture wrongs the people should not brook.

The crop was cut and baled; Our anarchist grew shier; His courage slowly failed, Till, when there came a buyer, The agitator fled to other lands, For fear of 123456 bands.

No. 267.—Geographical Anagrams.

1. On a perch. A cape at the extremity of a large continent.

2. Oh, so cool! A group of islands in the Chinese sea.

3. Sing on, Kent. A suburb of London, containing a royal palace.

4. One halt. A town in Ireland on the

5. O! that drum. A town in England taking its name from a river upon which it stands.

6. Lo! best soap. A seaport of European Russia.

7. Gay law. A county in Ireland.

Wise and Otherwise.

Every man has his prejudices, and every woman her bias.

Columbus made the egg stand, but Italians of less renown have made the peanut

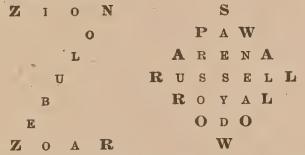
Fogs are mist before they are gone.

Don't laugh at the cat for running around after her tail. She is only pursuing her end.

Key to the Puzzler.

No. 255.—The Lads' Latin: Man is a sorial animal.

No. 256.—Initial Puzzle and Novel Diamond: Initial — Zachariah. Diamond— Sparrow, swallow.



No. 257. - A Question of Cows: Five and

No. 258.—Charade: Nosegay. No. 259.—Picture Puzzle: 1. Purrs. 2. Eats. 3. Runs. 4. Crawls. 5. Howls. Initials—Perch.

No. 260.—A Maze of Letters: "Many things difficult to design prove easy to performance."

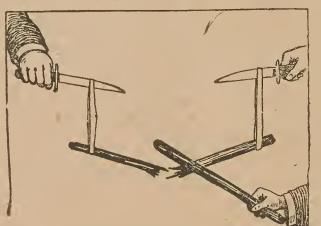
No. 261.—Word Changes: Trail, grail,

rail, lair, air, airs, pairs.

No. 262.—Enigmatical Birds: 1. Robin. 2. Heron. 3. Yellowhammer. 4. Chaffinch. 5. Sparrow. 6. Wheatear.

The Principle of Inertia.

By applying the principle of inertia we may produce a number of interesting tricks that will amuse and perhaps instruct some of the big folks as well as the children. One trick requires an old broomstick, sawed off at the broom end. Two paper rings about twelve



THE PRINCIPLE OF INERTIA. inches in diameter are made by pasting together strips of writing paper an inch wide. Two sharp table knives or razors should be held by two persons, each holding one on the same level with the sharp edge upward. Over these the paper rings are to be passed and the broomstick suspended by the paper rings. The performer then takes a strong stick and strikes the broomstick a sharp, strong blow in the middle, and it breaks instantly, without tearing the paper rings or causing them to cut on the razors.

Or this can be done by sticking a needle in each end of the broomstick and resting the needles on the edges of glass goblets stood on chairs. In either case the blow struck in the middle breaks the stick without moving the supports. A pile of checkers may be put on the table and by one blow with the edge of a knife the center or even the bottom one may be removed without disturbing the others.

How to Make a Paper Fish Swim,

Cut out of ordinary paper a fish. In the center of the body must be a circular opening, communicating with the tail by a narrow canal. Place water in an oblong vessel and lay the fish carefully on the water, so that its under side will be thoroughly wetted, though its upper surface remains dry.

Pour delicately one or two drops of oil within the circular opening. The oil will strive to spread itself over the surface of the water, but by doing so it can only travel along the little canal that leads to the tail. By a reactive effect the fish will be impelled in a direction opposite to that in which the oil will go. The movement will last quite long.

The Youth's Realm.











CHANCE FOR COLLECTORS



R. Percy A. Fuller, the sup erintendent of the stamp division at the Boston postoffice, has \$20.000 worth of newspaper stamps which he will sell at a great bargain.

Such bargains in stamps, Mr. Fuller says, was never

heard of before in the history of the post-office.

For \$5 one can purchase a set of these handsome stamps, the face value of which is \$187.93. This is the way in which it happens that Mr, Fuller is able to make this great discount.

Some six months ago the department ceased issuing these newspaper stamps, which were never on sale for the public as a matter of fact, but were designed especially for the use of newspaper publishers. For instance, a newspaper publisher deposits 100 pounds of paper in the postoffice for mailing. He was given a receipt on payment of the postage and attached to this receipt was one of these stamps. This scheme has been done away with and the stamps have been called in.

They resemble the Columbian issue, made for the world's fair, and in the set are 12 stamps, ranging in denomination from one cent to \$100. The colors are all different, and the designs are very beautiful.

Since the withdrawal of this issue from service the department has had hundreds of applications for sets of these stamps. It is estimated that there are in the United States 1.0 0.000 stamp collectors.

As soon as it became known that the department had withdrawn this issue stamp collectors from all over the country began to write the department asking if it were not possible to secure a set of these stamps for their collections. The demand was so great and persistent the postoffice authorities decided to take the \$1,000,000 worth of this issue that they had on their hands and offer them for sale at the reasonable price of \$5 per set.

Boston's share of this lot is \$20,000 worth. They arrived early yesterday and were immediately placed on sale at the general post-office.

TAKEN FROM BOSTON GLOBE.

Sales of documentary stamps were exceptionally heavy the other day in the Second Revenue District of New York, indicating transactions in the way of organization and reorganization of big trusts or other large companies. The sales for the day amounted to \$63,197.97. Of these there were 758 stamps of the denomination of \$50, which were all taken by one firm; 85 of the denomination of \$10, 201 of \$5, 182 of \$3 and 1,875 of \$1. These represent transactions running far into the millions. N. Y. Commercial.

STAMPS NOT CANCELLED.

B. G. Wernick who carries on the Hanover Drug Co., at 257 Hanover St., was held by the U. S. Commissioner Fiske yesterday afternoon for trial in the U. S. District Court, on a charge of failing to cancel the stamps on

cigar boxes.

Collectors Sweet and Davis visited his qlace Feb. 16, and seized a number of boxes from which cigars were being sold, but on which the revenue stamps had not been cancelled, it was claimed, as repuired by law.

Clarence Hill, the 16-year-old Hudson boy arrested by the post office inspectors a few weeks ago, on a charge of using the mails in an attempt to defraud, was before U. S. Com. Fiske the other day, and, waiving examination was held to the district court for trial.

Young Hill has a mania for collecting stamps, and the present unpleasant situation in which he finds himself came from his efforts to secure rare and valuable stamps from agencies in other cities.

He wrote to them ordering the stamps he had selected from their catalogues under the name of Mrs. G. R. Jones, and enclosed checks on the Hudson banks with different

checks on the Hudson banks with different names signed.

The proceedings were so irregular that the companies written to asked the post office department to investigate. One check for \$200 bearing a Hudson man's name was sent

\$300 bearing a Hudson man's name was sent to a St. Louis stamp concern; another for \$250 with the name of L. D. Asplee a well-known politician, was sent elsewhere, and also one drawn for \$350 came back from New York.

Altogether forged checks for a total of about \$1,000 are now in the possession of the U.S. officials and more are expected.

The boy takes the matter as not at all serious, and does not seem to be disturbed. He says they can only send him to a reform school, on account of his age, and is guessing at the one he will become an inmate of.

The Hill family moved from Lynn to Hudson some five years ago. The boy's father is dead, and Mrs. Hill has been employed in a shoe factory.

A Grateful Cat.

A Boston family had a cat of which they thought a great deal. The cat was sick, and in spite of careful nursing, catnip tea and all they could do, the cat grew worse, and they had to call the doctor. The doctor soon put pussy on her feet again.

Not long after this doctor was called again to see a member of the same family. No sooner had the doctor entered the room than the cat appeared, took a seat beside the doctor and did not stir until the physician had left. Every day the doctor returned, and every day the cat sprung to greet him with every appearance of delight.

Pace of Camels.

Seven miles an hour is the camel's best pace, nor can it maintain this rate over two hours. Its usual speed is about five miles an hour—a slow, lounging pace, beyond which it is dangerous, with nine camels out of ten, to urge them, or else, as Asiatics say, they "break their hearts," and literally die on the spot.

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